

POOR LEGIBILITY

ONE OR MORE PAGES IN THIS DOCUMENT ARE DIFFICULT TO READ
DUE TO THE QUALITY OF THE ORIGINAL

CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612
P.O. Box 12681
Oakland, CA 94604-2681
Tel 510.251.2426
Fax 510.893.8205



CH2MHILL

October 15, 2008
264204.PC.80/MIPC.C220H

Mr. Henry Chui
California Environmental Protection Agency
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2721

Subject: Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02, Investigation Area C2, Lennar Mare Island, Vallejo, California

Dear Mr. Chui:

Enclosed are two copies of the *Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02, Investigation Area C2, for Mare Island, Vallejo, California.*

This document was prepared by Lennar Mare Island, LLC (LMI) as part of the scope of the Environmental Services Cooperative Agreement to complete remaining environmental work at Mare Island, and in accordance with the Consent Agreement between LMI, City of Vallejo, and the California Environmental Protection Agency, Department of Toxic Substances Control. An electronic version of this submittal is being sent via email.

Please submit your comments to me at the above address or via e-mail at Stephen.Farley@ch2m.com by November 14, 2008.

If you have any questions regarding this document, please contact me at 707/562-1015 extension 103 or Michael Sanchez at 530/229-3310.

Sincerely,

CH2M HILL

Michael Sanchez
Project Manager

Stephen M. Farley, P.G.
Quality Control Manager

Mr. Henry Chui
October 15, 2008
Page 2

Copy to (with enclosures):

Mr. Paisha Jorgensen
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
(Non-PCB documents only;
Also electronic copy of non-PCB documents)

Mr. Gordon Hart
Paul, Hastings, Janofsky, Walker, LLP
55 Second Street, 24th Floor
San Francisco, CA 94105-3411

Ms. Carolyn d'Almeida
U.S. EPA Region 9 (SFD 8-1)
75 Hawthorne Street, 9th Floor
San Francisco, CA 94105

Mr. Gil Hollingsworth
Mare Island Conversion Division
City of Vallejo
555 Santa Clara Street
Vallejo, CA 94590-5934
(Electronic copy only)

Mr. Neal Siler
Lennar Mare Island, LLC
690 Walnut Avenue, Suite 100
Vallejo, CA 94592

Ms. Myrna Hayes
816 Branciforte Street
Vallejo, CA 94590

Mr. Bob Palmer
Caretaker Site Office, SF Bay
410 Palm Ave., Bldg. 1, Suite 161
San Francisco, CA 94130
(2 copies)

Mr. Saul Bloom
Arc Ecology
4634 - 3rd Street
San Francisco, CA 94124
(Electronic copy only)

Ms. Sheila Roebuck
Lennar Mare Island, LLC
690 Walnut Avenue, Suite 100
Vallejo, CA 94592
(Electronic copy of IAs D1 and H2 only)

CH2M HILL copies:

Paula Bolio
Clemena Balbuena
Jen Tausch
Starr Dehn (final link only)
John Romie (Paper and electronic copy of all
FOPL documents, otherwise electronic copy
of final documents only)

Mr. Henry Chui
October 15, 2008
Page 3

Copy to (without enclosures):

Ms. Janet Whitlock
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

Mr. Justice Budu
107 Fieldstone Way
Vallejo, CA 94589

Ms. Laurie Sullivan
National Oceanic and Atmospheric
Administration
75 Hawthorne Street, 9th Floor
San Francisco, CA 94105
(Electronic copy only via email)

Ms. Patricia Port
U.S. Department of Interior
1111 Jackson Street, Suite 520
Oakland, CA 94607

Mr. Ron Pilkington
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Mr. Mike Coffey
6 Oricle Court
American Canyon, CA 94503

Mr. Kenneth Browne
109 El Camino Real
Vallejo, CA 94590

Mr. James O'Loughlin
1449 Sheridan Drive
Napa, CA 94558

Mr. Adam A. Chavez
1031 Florida Street
Vallejo, CA 94590-5513

Mr. Max Delaney
San Francisco Bay Commission
50 California Street, Suite 2600
San Francisco, CA 94102

Mr. Gerald Karr
149 Garden Court
Vallejo, CA 94591

Mr. Terry Schmidtbauer
Dept. of Resource Management
County of Solano
675 Texas Street, Suite 5500
Fairfield, CA 94533

Ms. Paula Tygielski
456 East L Street
Benicia, CA 94510

Mr. Donald Parker
Vallejo Fire Department
970 Nimitz Street
Vallejo, CA 94592

Draft

**Site Characterization and Cleanup
Action Summary Report for
Polychlorinated Biphenyl Sites
Building 116 AL#01 and AL#02,
Investigation Area C2,
Lennar Mare Island,
Vallejo, California**

Prepared for
Department of Toxic Substances Control

October 2008

CH2MHILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

Contents

	Page
Section	
Acronyms and Abbreviations	iii
1.0 Introduction.....	1-1
2.0 Site Identification and Background.....	2-1
2.1 PCB Site Building 116 AL#01.....	2-2
2.2 PCB Site Building 116 AL#02.....	2-3
3.0 Cleanup Action Summary	3-1
4.0 Polychlorinated Biphenyl Site Closure Process	4-1
5.0 Conclusions	5-1
6.0 References.....	6-1

Appendices

A	CH2M HILL Verification Sampling Analytical Data
B	Waste Manifests for PCB Sites Building 116 AL#01 and AL#02

Tables

(located at the end of each section)

2-1	Previous Sample Results for PCB Site Building 116 AL#01	2-5
2-2	Previous Sample Results for PCB Site Building 116 AL#02	2-8
3-1	Verification Sample Results for PCB Sites Building 116 AL#01 and AL#02.....	3-3

Figures

(located at the end of each section)

2-1	Location of Building 116 Former Transformer Room	2-9
2-2	PCB Sites Building 116 AL#01 and AL#02 Previous Sampling Locations and PCB Concentrations	2-10
2-3	PCB Sites Building 116 AL#01 and AL#02 PCB Concentrations prior to CH2M HILL Removal Action.....	2-11
3-1	PCB Sites Building 116 AL#01 and AL#02 Removal Area and Verification Sampling Locations.....	3-5

Acronyms and Abbreviations

µg/100 cm ²	micrograms per 100 square centimeters
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
Cleanup Plan	Cleanup Plan for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02 in Investigation Area C1, Eastern Early Transfer Parcel, Lennar Mare Island, Vallejo, California
DTSC	State of California Environmental Protection Agency, Department of Toxic Substances Control
LMI	Lennar Mare Island, LLC
mg/kg	milligrams per kilogram
Navy	United States Department of the Navy
NFA	no further action
PCB	polychlorinated biphenyl
PRG	preliminary remediation goal
SSPORTS	Supervisor of Shipbuilding, Conversion and Repair, Portsmouth, Virginia, Environmental Detachment
TtEMI	Tetra Tech Environmental Management, Inc.
TWD	Technical Work Document

1.0 Introduction

This report summarizes the polychlorinated biphenyl (PCB) cleanup actions performed by CH2M HILL at PCB Sites Building 116 AL#01 and AL#02 in Investigation Area C2 of Lennar Mare Island, LLC's (LMI), Eastern Early Transfer Parcel. CH2M HILL prepared this summary in compliance with the Consent Agreement signed April 16, 2001, by LMI, the City of Vallejo, and the State of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) (LMI et al. 2001). The Consent Agreement specifies requirements for obtaining regulatory closure for sites of environmental concern in a manner that is consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

The cleanup action performed by CH2M HILL at PCB Sites Building 116 AL#01 and AL#02 consisted of demolishing the former transformer room and excavating the underlying soil. This cleanup action was conducted in accordance with the DTSC-approved "Cleanup Plan for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02 in Investigation Area C1, Eastern Early Transfer Parcel, Lennar Mare Island, Vallejo, California" (Cleanup Plan) (CH2M HILL 2007; DTSC 2007). The objectives of the cleanup action were achieved and the remaining total PCB concentrations at these sites meet the criteria for no further action (NFA) under CERCLA.

This document is organized into the following sections:

- **Section 1.0 - Introduction.** Provides an introduction to this report.
- **Section 2.0 - Site Identification and Background.** Provides site background and a description of previous sampling efforts.
- **Section 3.0 - Cleanup Action Summary.** Provides a description of CH2M HILL's cleanup actions at PCB Sites Building 116 AL#01 and AL#02.
- **Section 4.0 - Polychlorinated Biphenyl Site Closure Process.** Provides the rationale for site closure.
- **Section 5.0 - Conclusions.** Provides conclusions for this report.
- **Section 6.0 - References.** Provides references for documents used to prepare this report.

2.0 Site Identification and Background

Building 116 and the former transformer room are located west of Nimitz (formerly California) Avenue and Building 52, east of Railroad Avenue, north of Rickover Street, and south of Buildings 330 and 434, in Investigation Area C2. Figure 2-1 shows the locations of Building 116 and the former transformer room. Building 116 was built in 1905 and initially served as a production shop. The transformer room attached along the northern wall of Building 116 was used to house transformers associated with Building 116. The building and former transformer room are located in an area designated as the historic core of Mare Island. According to the *Preliminary Land Use Plan* (SWA Group 2000), the proposed future use for Building 116 is industrial. Although Building 116 is not scheduled for deconstruction, it was determined that the former transformer room (PCB Sites Building 116 AL#01 and AL#02) attached to Building 116 did not have the same historic significance and, therefore, could be deconstructed (Siler 2006, pers. comm.).

Two PCB sites associated with the Building 116 former transformer room are listed in the Consent Agreement (LMI et al. 2001): AL#01 and AL#02. PCB Site Building 116 AL#01 includes the transformer pad and northwestern wall of the former transformer room. PCB Site Building 116 AL#02 is the floor drain located in the former transformer room (Figure 2-2). Documentation of United States Department of the Navy (Navy) PCB site assessment sampling, cleanup actions, and confirmation sampling for the two Building 116 PCB sites is contained in the *Final Basewide Polychlorinated Biphenyl Confirmation Sampling Summary Report* (Tetra Tech Environmental Management, Inc. [TtEMI] 1998), in the section for Parcel 04-B1.

The transformer room was a small structure, approximately 11 by 24 feet, attached to the outside, northwest wall of Building 116 (Figure 2-1). As part of the initial assessment at PCB Sites Building 116 AL#01 and AL#02, personnel from Supervisor of Shipbuilding, Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS) collected six samples (6150-0154 through 6150-0159) on June 4, 1996, in stained areas of the concrete floor (Figure 2-2). PCBs were detected in four samples, at total concentrations of 119 (6150-0154), 4.0 (6150-0155), 788 (6150-0156), and 53,400 milligrams per kilogram (mg/kg) (6150-0157). PCB concentrations were below reporting limits in samples 6150-0158 (less than 1 mg/kg) and 6150-0159 (i.e., less than a reporting limit of 1 mg/kg in each sample) (Table 2-1); however, collection locations for these two samples were not provided in historical documentation for the sites. Because PCBs were detected at concentrations ranging from 4 to 53,400 mg/kg in these six samples, SSSPORTS issued Technical Work Document (TWD) 96-1350 on October 23, 1996, to remove contamination in the former transformer room (SSSPORTS 1996a).

Tables 2-1 and 2-2 summarize the results of previous sampling at PCB Sites Building 116 AL#01 and AL#02, respectively, including the sample (or boring) numbers, matrices, dates, and total PCB concentrations (or laboratory reporting limits if PCBs were not detected). Figure 2-2 shows the sampling locations and PCB concentrations prior to cleanup actions by SSSPORTS and CH2M HILL at PCB Sites Building 116 AL#01 and AL#02. Figure 2-3 shows

the sampling locations remaining after implementation of SSPTS TWDs and PCB concentrations prior to CH2M HILL's cleanup actions at PCB Sites Building 116 AL#01 and AL#02 (SSPTS 1996a and 1998).

2.1 PCB Site Building 116 AL#01

On February 13, 1997, before cleanup actions were performed, 28 solid floor and wall samples (7037-0064, 7037-0065, 7037-0067 through 7037-0069, 7037-0071 through 7037-0076, and 7037-0078 through 7037-0094) and 5 wipe samples (7307-0100 through 7307-0104) were collected from PCB Site Building 116 AL#01 (Figure 2-2) (SSPTS 1996b). PCBs were detected in 27 solid samples, at concentrations ranging from 1.2 to 15,100 mg/kg (Table 2-1). PCBs were detected in four wipe samples, at concentrations ranging from 28 to 25,200 micrograms per 100 square centimeters ($\mu\text{g}/100\text{ cm}^2$) (Table 2-1). Wipe sample locations and media were not provided with the historical data for this site. Eight additional samples (7135-0082 through 7135-0089) were collected from the walls and floor in PCB Site Building 116 AL#01 on June 10, 1997 (Figure 2-2). PCB concentrations ranged from 1.7 to 25 mg/kg in those samples (Table 2-1).

In July 1997, the Navy performed cleanup in accordance with TWD 96-1350 to remove the concrete floor of PCB Site Building 116 AL#01 (SSPTS 1996b). The floor of the site was scabbled to specified depths according to PCB concentrations in samples collected before the TWD was issued, as follows:

- Area A, which contained sample locations 6150-0154 (119 mg/kg) and 6150-0155 (4 mg/kg), was scabbled to a depth of 0.25 inch below ground surface (bgs).
- Area B, which contained sample location 6150-0156 (788 mg/kg), was scabbled to 0.5 inch bgs.
- Area C, which contained sample location 6150-0157 (maximum concentration of 53,400 mg/kg), was scabbled to 0.75 inch bgs.
- Area D (sides of utility vault) was scabbled to 0.25 inch bgs in unstained areas and to 0.75 inch where stains were visible.

According to historical Navy documentation, two additional samples (6150-0158 and 6150-0159) were collected at PCB Sites Building 116 AL#01 and AL#02 prior to implementation of TWD 96-1350, but their locations were not provided (Figure 2-2). In addition, the Navy collected 36 solid (concrete) and 5 wipe (media unknown) samples at PCB Sites Building 116 AL#01 and AL#02 from the date TWD 96-1350 was issued to the date the TWD was implemented. PCB concentrations in these samples are shown in Table 2-1 and on Figure 2-2. Areas scabbled by the Navy during implementation of TWD 96-1350 are shown on Figure 2-2. In addition to scabbling, the Navy double-washed accessible conduit and metal support surfaces as high as 12 inches above the floor, utility vault cover plates, and steel rails with kerosene and rinsed them, in accordance with TWD 96-1350 (SSPTS 1996a).

After TWD 96-1350 had been implemented, TtEMI personnel collected two confirmation samples at PCB Site Building 116 AL#01 on July 16, 1997 (Figure 2-2). Total PCBs were reported at a concentration of 0.06J¹ mg/kg in sample PC1441, and at a concentration of 0.4J mg/kg in sample PC1442 (TtEMI 1998) (Table 2-1). Because of these results, PCB assessment and cleanup activities were considered complete (SSPORTS 1996b; TtEMI 1998).

On October 20, 2006, CH2M HILL conducted a soil boring investigation to evaluate the vertical extent of PCB contamination at PCB Site Building 116 AL#01. Three soil borings (B116AL01-GB0101, B116AL01-GB0103, and B116AL01-GB0106) were advanced at PCB Site Building 116 AL#01 to an approximate depth of 10 feet bgs and soil samples were collected from each boring at depths of 2, 4, 6, and 9 feet bgs (Figure 2-2). Boring B116AL01-GB0102 was advanced within the footprint of Building 116 AL#01 to an approximate depth of 4 feet bgs and samples were collected at depths of 2 and 4 feet bgs. The total PCB concentration in soil sample collected from boring B116AL01-GB0101 at 2 feet bgs was 0.051 mg/kg. The total PCB concentrations in the other soil samples collected from these borings were below reporting limits (which ranged from 0.0018 to 0.026 mg/kg). One composite sample was collected from concrete at boring locations B116AL01-GB0101 through B116AL01-GB0103 and B116AL01-GB0106. PCBs were detected at a total concentration of 1,000 mg/kg (Aroclor-1260) in this composite concrete sample (B116AL01-CH0107-CO).

2.2 PCB Site Building 116 AL#02

On February 13, 1997, before performing cleanup activities at PCB Site Building 116 AL#02, SSPTS personnel collected three samples (7037-0066, 7037-0070, and 7037-0077) from PCB Site Building 116 AL#02 (Figure 2-2). PCBs were detected at total concentrations of 2.2 mg/kg in sample 7037-0066, 2.5 mg/kg in sample 7037-0070, and 18 mg/kg in sample 7037-0077 (Table 2-2).

On June 9, 1997, SSPTS personnel collected one wipe sample (7135-0055) from the floor drain at the northern end of PCB Site Building 116 AL#02 (SSPTS 1996b). PCBs were detected at a concentration of 69 µg/100 cm² in that wipe sample, but the exact sample collection location was not identified in the historical documentation. Because PCB concentrations in sample 7135-0055 were above 1 µg/100 cm², SSPTS personnel issued TWD 96-1350, Revision A (SSPTS 1998), which specified removing concrete within a 1-foot radius of the floor drain and excavating and removing the underlying crushed rock foundation and soil. Removal actions under TWD 96-1350, Revision A, were performed in January 1999. TWD 96-1350, Revision A, did not include cleanup goals for this removal action.

In January 1999, three samples (9-0091, 9-0092, and 9-0102) were collected from PCB Site Building 116 AL#02 prior to removal of concrete, soil, and pipes under TWD 96-1350, Revision A (Figure 2-2). Laboratory reports for these samples indicated that sample 9-0091 was collected from sediment in the drain pipe (6.6 mg/kg), sample 9-0092 was collected from soil beneath the drain pipe (1.0 mg/kg), and sample 9-0102 was collected from the interior of the drain pipe (4.9 mg/kg). Sample locations have been estimated on Figure 2-2.

¹"J" indicates an estimated concentration.

The drain pipe and the overlying concrete were removed during the implementation of TWD 96-1350, Revision A, and disposed of off site (SSPORTS 1998).

TtEMI personnel collected two confirmation samples (PC7109 and PC7110) at PCB Site Building 116 AL#02 on February 19, 1999 (Figure 2-2). PCBs were detected at a total concentration of 0.2 mg/kg in sample PC7109, collected from soil beneath the former drain pipe. The total PCB concentration was 5 mg/kg in sample PC7110, composed of concrete collected from the surface of the remaining portion of the transformer pad, directly adjacent to the former drain location (TtEMI 1998) (Table 2-2).

On October 20, 2006, CH2M HILL conducted a soil boring investigation to evaluate the vertical extent of PCB contamination at PCB Site Building 116 AL#02. Two soil borings (B116AL01-GB0104 and B116AL01-GB0105) were advanced to approximately 10 feet bgs within the footprint of PCB Site Building 116 AL#02 and soil samples were collected at depths of 2, 4, 6, and 9 feet bgs (Figure 2-2). PCBs were detected in two samples from boring B116AL01-GB0104 at 2 feet bgs at a total concentration of 4.5 mg/kg and in one sample collected from boring B116AL01-GB0105 at 2 feet bgs at a total concentration of 0.23 mg/kg. Total PCB concentrations in other soil samples from these borings were below reporting limits (which ranged from 0.016 to 0.019 mg/kg) (Table 2-2).

TABLE 2-1

Previous Sample Results for PCB Site Building 116 AL#01

Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02,
Investigation Area C2, Lennar Mare Island, Vallejo, California

Sample or Boring Number	Depth (bgs)	Sample Matrix	Sample Date	Total PCB Concentration ^a	Comments
6150-0154	0	Concrete	06/04/96	119 mg/kg	Aroclor-1260 = 119 mg/kg; stain-specific sample; removed under TWD 96-1350
6150-0155	0	Concrete	06/04/96	4 mg/kg	Aroclor-1260 = 4 mg/kg; stain-specific sample; removed under TWD 96-1350
6150-0156	0	Concrete	06/04/96	788 mg/kg	Aroclor-1260 = 788 mg/kg; stain-specific sample; removed under TWD 96-1350
6150-0157	0	Concrete	06/04/96	53,400 mg/kg	Aroclor-1260 = 53,400 mg/kg; stain-specific sample; removed under TWD 96-1350
6150-0158	0	Concrete	06/04/96	<1 mg/kg	Stain-specific sample; removed under TWD 96-1350
6150-0159	0	Gravel	06/04/96	<1 mg/kg	Stain-specific sample; removed under TWD 96-1350
7037-0064	0	Concrete	02/13/97	<1 mg/kg	Sample removed under TWD 96-1350
7037-0065	0	Concrete	02/13/97	4.6 mg/kg	Aroclor-1260 = 4.6 mg/kg; removed under TWD 96-1350
7037-0067	0	Concrete	02/13/97	1.2 mg/kg	Aroclor-1260 = 1.2 mg/kg; removed under TWD 96-1350
7037-0068	0	Concrete	02/13/97	2.5 mg/kg	Aroclor-1260 = 2.5 mg/kg; removed under TWD 96-1350
7037-0069	0	Concrete	02/13/97	11 mg/kg	Aroclor-1260 = 11 mg/kg; removed under TWD 96-1350
7037-0071	0	Concrete	02/13/97	2.1 mg/kg	Wall sample; Aroclor-1260 = 2.1 mg/kg
7037-0072	0	Concrete	02/13/97	1.9 mg/kg	Wall sample; Aroclor-1260 = 1.9 mg/kg
7037-0073	0	Concrete	02/13/97	82 mg/kg	Aroclor-1260 = 82 mg/kg; removed under TWD 96-1350
7037-0074	0	Concrete	02/13/97	68 mg/kg	Aroclor-1260 = 68 mg/kg; removed under TWD 96-1350
7037-0075	0	Concrete	02/13/97	24 mg/kg	Aroclor-1260 = 24 mg/kg; removed under TWD 96-1350
7037-0076	0	Concrete	02/13/97	6.8 mg/kg	Aroclor-1260 = 6.8 mg/kg; removed under TWD 96-1350
7037-0078	0	Concrete	02/13/97	35 mg/kg	Wall sample; Aroclor-1260 = 35 mg/kg
7037-0079	0	Concrete	02/13/97	41 mg/kg	Wall sample; Aroclor-1260 = 41 mg/kg
7037-0080	0	Concrete	02/13/97	21 mg/kg	Wall sample; Aroclor-1260 = 21 mg/kg
7037-0081	0	Concrete	02/13/97	620 mg/kg	Wall sample; Aroclor-1260 = 620 mg/kg

TABLE 2-1

Previous Sample Results for PCB Site Building 116 AL#01

*Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02,
Investigation Area C2, Lennar Mare Island, Vallejo, California*

Sample or Boring Number	Depth (bgs)	Sample Matrix	Sample Date	Total PCB Concentration ^a	Comments
7037-0082	0	Concrete	02/13/97	620 mg/kg	Aroclor-1260 = 620 mg/kg; removed under TWD 96-1350
7037-0083	0	Concrete	02/13/97	99 mg/kg	Aroclor-1260 = 99 mg/kg; removed under TWD 96-1350
7037-0084	0	Concrete	02/13/97	670 mg/kg	Aroclor-1260 = 670 mg/kg; removed under TWD 96-1350
7037-0085	0	Concrete	02/13/97	15,100 mg/kg	Aroclor-1260 = 15,100 mg/kg; removed under TWD 96-1350
7037-0086	0	Concrete	02/13/97	7,600 mg/kg	Aroclor-1260 = 7,600 mg/kg; removed under TWD 96-1350
7037-0087	0	Concrete	02/13/97	6,400 mg/kg	Aroclor-1260 = 6,400 mg/kg; removed under TWD 96-1350
7037-0088	0	Concrete	02/13/97	11,200 mg/kg	Aroclor-1260 = 11,200 mg/kg; removed under TWD 96-1350
7037-0089	0	Concrete	02/13/97	10,000 mg/kg	Aroclor-1260 = 10,000 mg/kg; Sample removed under TWD 96-1350
7037-0090	0	Concrete	02/13/97	11,400 mg/kg	Aroclor-1260 = 11,400 mg/kg; removed under TWD 96-1350
7037-0091	0	Concrete	02/13/97	204 mg/kg	Aroclor-1260 = 204 mg/kg; removed under TWD 96-1350
7037-0092	0	Concrete	02/13/97	1,230 mg/kg	Aroclor-1260 = 1,230 mg/kg; removed under TWD 96-1350
7037-0093	0	Concrete	02/13/97	7,000 mg/kg	Wall sample; Aroclor-1260 = 7,000 mg/kg
7037-0094	0	Concrete	02/13/97	3.8 mg/kg	Aroclor-1260 = 3.8 mg/kg; removed under TWD 96-1350
7037-0100	0	Unknown	02/13/97	25,200 µg/100 cm ₂	Aroclor-1260 = 25,200 µg/100 cm ²
7037-0101	0	Unknown	02/13/97	190 µg/100 cm ²	Aroclor-1260 = 190 µg/100 cm ²
7037-0102	0	Unknown	02/13/97	2,450 µg/100 cm ²	Aroclor-1260 = 2,450 µg/100 cm ²
7037-0103	0	Unknown	02/13/97	28 µg/100 cm ²	Aroclor-1260 = 28 µg/100 cm ²
7037-0104	0	Unknown	02/13/97	<1 µg/100 cm ²	
7135-0082	0	Concrete	06/10/97	13 mg/kg	Wall sample; Aroclor-1260 = 13 mg/kg
7135-0083	0	Concrete	06/10/97	2.6 mg/kg	Wall sample; Aroclor-1260 = 2.6 mg/kg
7135-0084	0	Concrete	06/10/97	1.7 mg/kg	Wall sample; Aroclor-1260 = 1.7 mg/kg
7135-0085	0	Concrete	06/10/97	3.5 mg/kg	Wall sample; Aroclor-1260 = 3.5 mg/kg
7135-0086	0	Concrete	06/10/97	7.6 mg/kg	Trench sample; Aroclor-1260 = 7.6 mg/kg
7135-0087	0	Concrete	06/10/97	25 mg/kg	Trench sample; Aroclor-1260 = 25 mg/kg

TABLE 2-1

Previous Sample Results for PCB Site Building 116 AL#01

Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02,
Investigation Area C2, Lennar Mare Island, Vallejo, California

Sample or Boring Number	Depth (bgs)	Sample Matrix	Sample Date	Total PCB Concentration ^a	Comments
7135-0088	0	Concrete	06/10/97	2.3 mg/kg	Wall sample; Aroclor-1260 = 2.3 mg/kg
7135-0089	0	Concrete	06/10/97	2.0 mg/kg	Wall sample; Aroclor-1260 = 2.0 mg/kg
PC1441	0	Concrete	07/16/97	0.06J mg/kg	Aroclor-1260 = 0.06J mg/kg; TWD 96-1350 confirmation sample
PC1442	0	Concrete	07/16/97	0.4J mg/kg	Aroclor-1260 = 0.4J mg/kg; TWD 96-1350 confirmation sample
B116AL01-GB0101	2	Soil	10/20/06	0.051 mg/kg	Aroclor-1260 = 0.051 mg/kg
B116AL01-GB0101	4	Soil	10/20/06	<0.017 mg/kg	Proxy value used for Arcolor-1260 0.017 mg/kg
B116AL01-GB0101	6	Soil	10/20/06	<0.024 mg/kg	Proxy value used for Arcolor-1260 0.024 mg/kg
B116AL01-GB0101	9	Soil	10/20/06	<0.0018 mg/kg	Proxy value used for Arcolor-1260 0.0018 mg/kg
B116AL01-GB0102	2	Soil	10/20/06	<0.018 mg/kg	Proxy value used for Arcolor-1260 0.018 mg/kg
B116AL01-GB0102	4	Soil	10/20/06	<0.019 mg/kg	Proxy value used for Arcolor-1260 0.019 mg/kg
B116AL01-GB0103	2	Soil	10/20/06	<0.016 mg/kg	Proxy value used for Arcolor-1260 0.016 mg/kg
B116AL01-GB0103	4	Soil	10/20/06	<0.019 mg/kg	Proxy value used for Arcolor-1260 0.019 mg/kg
B116AL01-GB0103	6	Soil	10/20/06	<0.019 mg/kg	Proxy value used for Arcolor-1260 0.019 mg/kg
B116AL01-GB0103	9	Soil	10/20/06	<0.026 mg/kg	Proxy value used for Arcolor-1260 0.026 mg/kg
B116AL01-GB0106	2	Soil	10/20/06	<0.019 mg/kg	Proxy value used for Arcolor-1260 0.019 mg/kg
B116AL01-GB0106	4	Soil	10/20/06	<0.02 mg/kg	Proxy value used for Arcolor-1260 0.02 mg/kg
B116AL01-GB0106	6	Soil	10/20/06	<0.018 mg/kg	Proxy value used for Arcolor-1260 0.018 mg/kg
B116AL01-GB0106	9	Soil	10/20/06	<0.017 mg/kg	Proxy value used for Arcolor-1260 0.017 mg/kg
B116AL01-CH0107	0	Concrete	10/20/06	1,000 mg/kg	Composite sample; Arcolor-1260 = 1,000 mg/kg

^aFor samples collected by CH2M HILL, total PCBs are calculated by summing all of the detected Aroclors or by using a proxy value of one-half the method detection limit for historically detected Aroclors and adding this to detected Aroclors.

Notes:

Sample numbers beginning with PC were collected by TtEMI. Sample numbers beginning with B were collected by CH2M HILL. Other samples were collected by SSPORTS.

Samples collected by TtEMI were reported to one significant figure.

TABLE 2-2

Previous Sample Results for PCB Site Building 116 AL#02

Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02,
Investigation Area C2, Lennar Mare Island, Vallejo, California

Sample or Boring Number	Depth (bgs)	Sample Matrix	Sample Date	Total PCB Concentration ^a	Comments
7037-0066	0	Concrete	02/13/97	2.2 mg/kg	Aroclor-1260 = 2.2 mg/kg; removed under TWD 96-1350, Revision A
7037-0070	0	Concrete	02/13/97	2.5 mg/kg	Aroclor-1260 = 2.5 mg/kg
7037-0077	0	Concrete	02/13/97	18 mg/kg	Aroclor-1260 = 18 mg/kg; removed under TWD 96-1350, Revision A
7135-0055	0	Steel	06/09/97	69 µg/100 cm ²	Aroclor-1260 = 69 µg/100 cm ² ; removed under TWD 96-1350, Revision A
9-0091	0	Sediment	01/21/99	6.6 mg/kg	Aroclor-1260 = 6.6 mg/kg; removed under TWD 96-1350, Revision A; sediment in drain pipe
9-0092	0	Soil	01/21/99	1 mg/kg	Aroclor-1260 = 1.0 mg/kg; removed under TWD 96-1350, Revision A; soil beneath drain pipe
9-0102	0	Solid	01/25/99	4.9 mg/kg	Aroclor-1260 = 4.9 mg/kg; sample removed under TWD 96-1350, Revision A; solid from drain pipe interior
PC7109	0	Soil	02/19/99	0.2 mg/kg	Aroclor-1260 = 0.2 mg/kg; TtEMI confirmation sample
PC7110	0	Concrete	02/19/99	5 mg/kg	Aroclor-1260 = 5 mg/kg; TtEMI confirmation sample
B116AL01-GB0104-	2	Soil	10/20/06	4.5 mg/kg	Aroclor-1260 = 4.5 mg/kg
B116AL01-GB0104-	4	Soil	10/20/06	<0.018 mg/kg	Proxy value used for Aroclor-1260 0.018 mg/kg
B116AL01-GB0104-	6	Soil	10/20/06	<0.018 mg/kg	Proxy value used for Aroclor-1260 0.018 mg/kg
B116AL01-GB0104-	9	Soil	10/20/06	<0.018 mg/kg	Proxy value used for Aroclor-1260 0.018 mg/kg
B116AL01-GB0105-S2	2	Soil	10/20/06	0.23 mg/kg	Aroclor-1260 = 0.23 mg/kg
B116AL01-GB0105-	4	Soil	10/20/06	<0.016 mg/kg	Proxy value used for Aroclor-1260 0.016 mg/kg
B116AL01-GB0105-	6	Soil	10/20/06	<0.019 mg/kg	Proxy value used for Aroclor-1260 0.019 mg/kg
B116AL01-GB0105-	9	Soil	10/20/06	<0.019 mg/kg	Proxy value used for Aroclor-1260 0.019 mg/kg

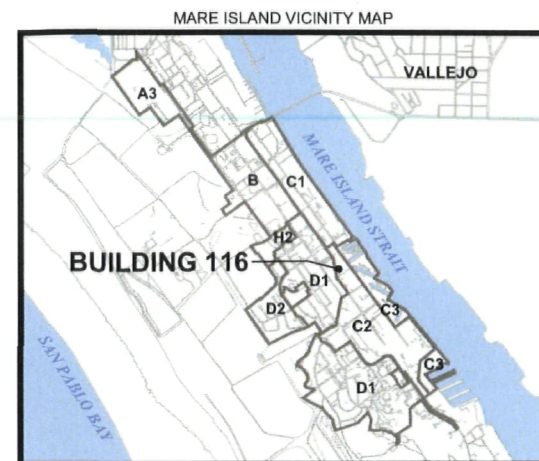
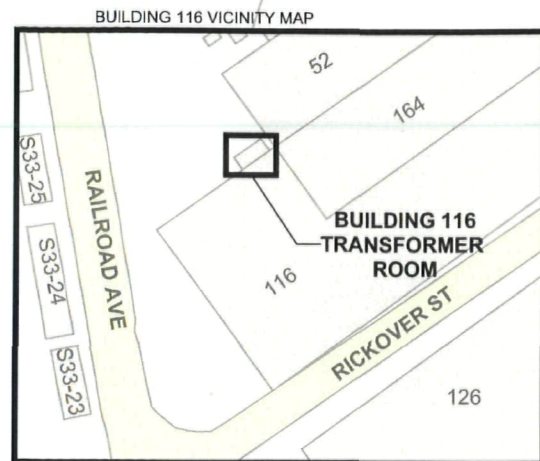
^aFor samples collected by CH2M HILL, total PCBs are calculated by summing all of the detected Aroclors or by using a proxy value of one-half the method detection limit for historically detected Aroclors and adding this to detected Aroclors.

Notes:

Sample numbers beginning with PC were collected by TtEMI. Sample numbers beginning with B were collected by CH2M HILL. Other samples were collected by SSPTS.

Samples collected by TtEMI were reported to one significant figure.





- LEGEND**
- PCB SAMPLE LOCATION ON THE WALL OF THE BUILDING
 - ⊕ CONCRETE CHIP SAMPLE
 - ⊙ GEOPROBE SAMPLE
 - SSPTS SCABBLED AREA
 - ▭ STRUCTURE
 - ▭ ROAD

SAMPLE LOCATION ————— 7037-0071
 PCB CONCENTRATION ————— 2.1= (0.0)
 SAMPLE BEGINNING DEPTH (FEET BGS) —————

- NOTES:**
1. "<" = NOT DETECTED AT OR ABOVE THE INDICATED CONCENTRATION
 2. "=" = ANALYTE WAS DETECTED
 3. GRAY LABEL = REMOVED SAMPLE LOCATION
 4. UNIT = mg/kg UNLESS OTHERWISE STATED
 5. COMPOSITE CONCRETE SAMPLE B116AL01-CH0107 (1,000= mg/kg) CONTAINED CONCRETE REMOVED FROM BORINGS B116AL01-GB0101 THROUGH B116AL01-GB0103 AND B116AL01-GB0106
 6. ANALYTE = TOTAL PCBs UNLESS OTHERWISE STATED
 7. SAMPLE LOCATIONS 9-0091, 9-0092, 9-0102, AND 7037-0055 ESTIMATED FROM DESCRIPTIONS IN HISTORICAL NAVY DOCUMENTATION
 8. FOR SAMPLES COLLECTED BY CH2M HILL, TOTAL PCBs ARE CALCULATED BY SUMMING ALL OF THE DETECTED AROCLORS OR BY USING A PROXY VALUE OF ONE-HALF THE METHOD DETECTION LIMIT FOR HISTORICALLY DETECTED AROCLORS AND ADDING THIS TO DETECTED AROCLORS
 9. A-1260 = AROCLOR-1260

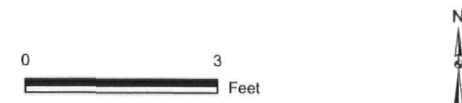
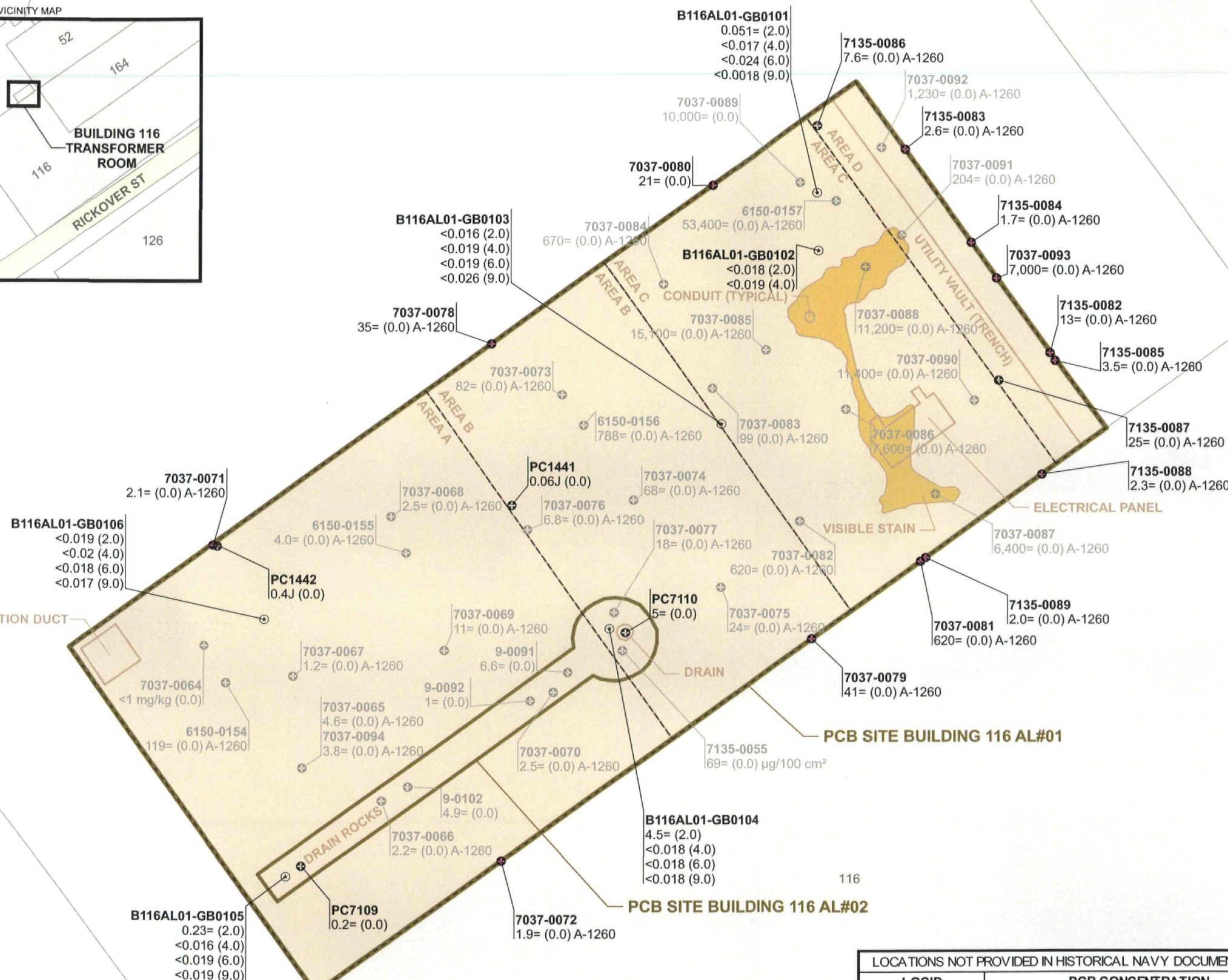
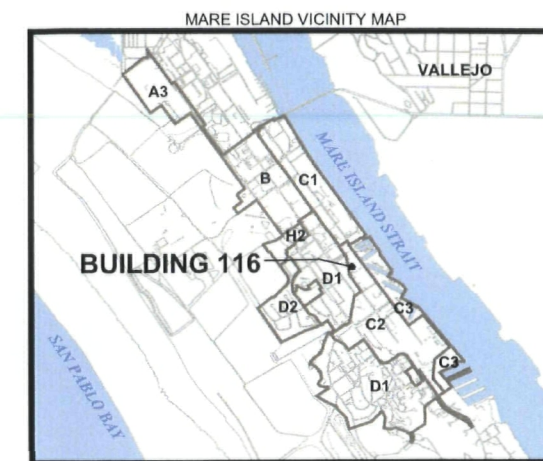
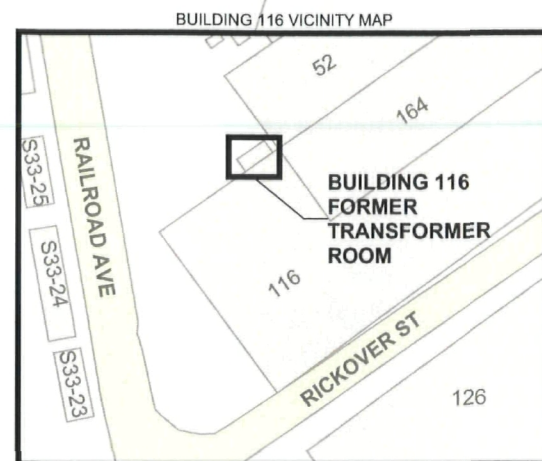


FIGURE 2-2
PCB SITES BUILDING 116 AL#01
AND AL#02 PREVIOUS SAMPLING
LOCATIONS AND PCB
CONCENTRATIONS
 LENNAR MARE ISLAND, VALLEJO, CALIFORNIA



LOCATIONS NOT PROVIDED IN HISTORICAL NAVY DOCUMENTATION	
LOCID	PCB CONCENTRATION
6150-0158	<1 (0.0) mg/kg
6150-0159	<1 (0.0) mg/kg
7037-0100	25,200= (0.0) µg/100 cm²
7037-0101	190= (0.0) µg/100 cm²
7037-0102	2,450= (0.0) µg/100 cm²
7037-0103	28= (0.0) µg/100 cm²
7037-0104	<1 (0.0) µg/100 cm²



- LEGEND**
- ⊕ CONCRETE CHIP SAMPLE
 - ⊙ GEOPROBE SAMPLE
 - PCB SAMPLE LOCATION ON THE WALL OF THE BUILDING
 - ▭ PROPOSED REMOVAL AREA
 - ▭ STRUCTURE
 - ▭ ROAD

SAMPLE LOCATION ————— 7037-0071
 PCB CONCENTRATION (mg/kg) ————— 2.1= (0.0)
 SAMPLE BEGINNING DEPTH (FEET BGS) —————

- NOTES:**
1. "<" = NOT DETECTED AT OR ABOVE THE INDICATED CONCENTRATION
 2. "=" = ANALYTE WAS DETECTED
 3. ANALYTE = TOTAL PCBs UNLESS OTHERWISE STATED
 4. COMPOSITE CONCRETE SAMPLE B116AL01-CH0107 (1,000 mg/kg) CONTAINED CONCRETE REMOVED FROM BORINGS B116AL01-GB0101 THROUGH B116AL01-GB0103 AND B116AL01-GB0106
 5. FOR SAMPLES COLLECTED BY CH2M HILL, TOTAL PCBs ARE CALCULATED BY SUMMING ALL OF THE DETECTED AROCLORS OR BY USING A PROXY VALUE OF ONE-HALF THE METHOD DETECTION LIMIT FOR HISTORICALLY DETECTED AROCLORS AND ADDING THIS TO DETECTED AROCLORS

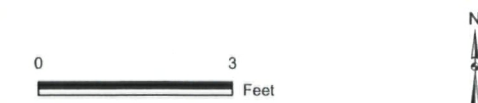
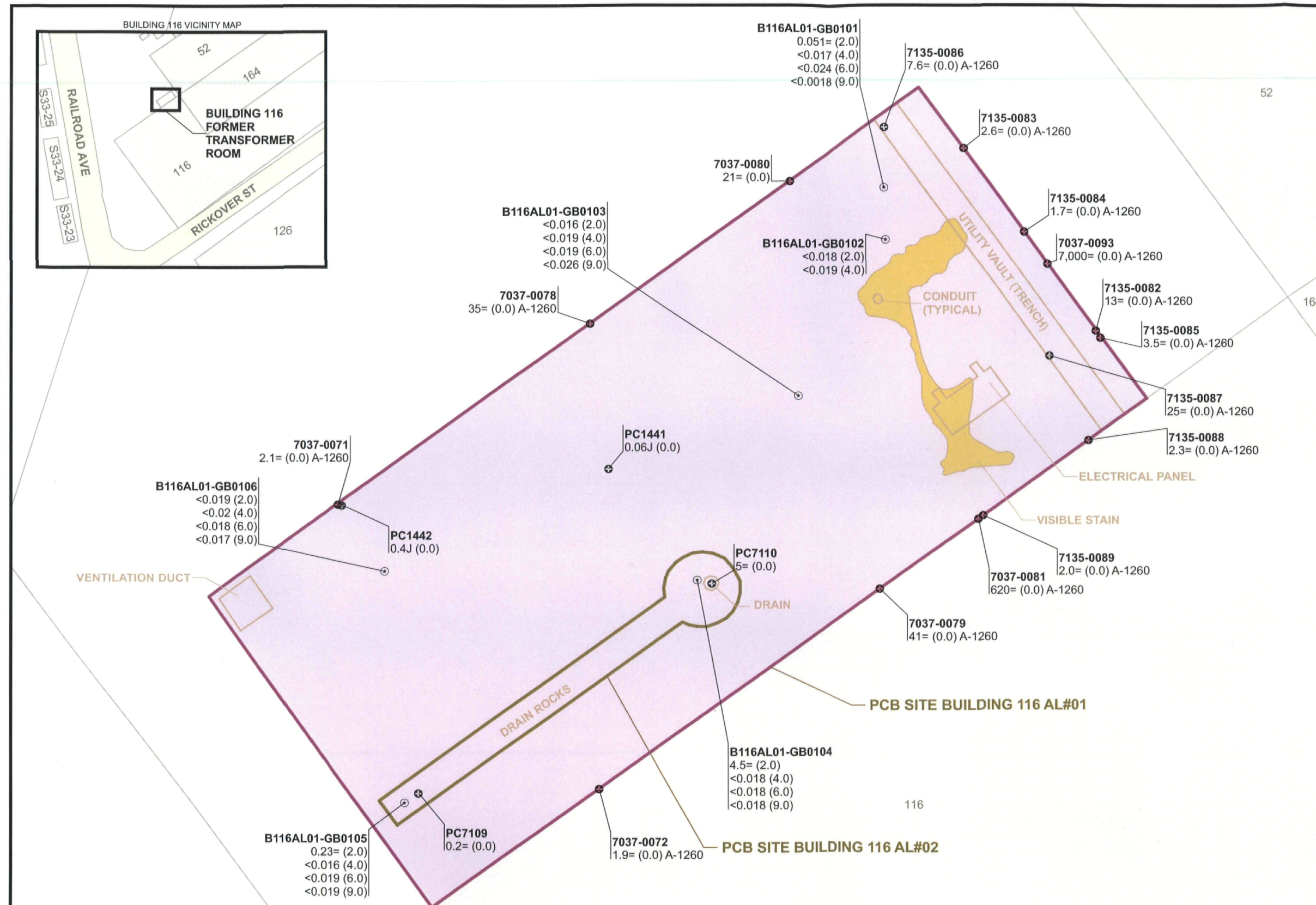


FIGURE 2-3
PCB SITES BUILDING 116 AL#01
AND AL#02 PCB CONCENTRATIONS
PRIOR TO CH2M HILL REMOVAL
ACTION
 LENNAR MARE ISLAND, VALLEJO, CALIFORNIA



3.0 Cleanup Action Summary

CH2M HILL's cleanup action at PCB Sites Building 116 AL#01 and AL#02 consisted of deconstructing the walls, ceiling, and floor of the Building 116 former transformer room (11-foot by 24-foot room adjacent to Building 116) and excavating underlying soil in accordance with the DTSC-approved Cleanup Plan (CH2M HILL 2007; DTSC 2007), and performing modifications approved by DTSC (Chui 2007, pers. comm.). Analytical results for verification samples collected during CH2M HILL's cleanup actions are summarized in Table 3-1 and provided in Appendix A.

Deconstruction preparation work at PCB Sites Building 116 AL#01 and AL#02 began April 26, 2007. The former transformer room was secured with a temporary fence, and the outdoor active transformer pad located north of the former transformer room was covered with a plywood structure for protection during the building deconstruction. The windows of Building 116 were covered with plastic. Island Energy verified that the electrical and gas supplies to the structure were shut off prior to deconstruction. Remaining electrical conduit inside the building was removed, and lead-based paint was scraped from the walls.

Building deconstruction began on May 1, 2007, under Permit No. DM07-0007. The metal exhaust stack of the building was removed, followed by the metal building roof. Deconstruction of the concrete ceiling and walls began at the west wall and was completed on May 2, 2007. Debris was loaded into a dump truck and transported to the stockpile area at 14th Street and Nimitz Avenue.

The concrete floor and approximately 2.5 feet of underlying soil at PCB Sites Building 116 AL#01 and AL#02 were removed between May 7 and 9, 2007. The thickness of the concrete slab ranged from 6 to 12 inches and extended approximately 2 inches above the ground surface. The total depth of the removal area was 3 feet, including the concrete slab and approximately 2.5 feet of underlying soil. Excavation began at the east end of the concrete pad and proceeded westward across the site. Concrete rubble was removed and transported to the stockpile at 14th Street and Nimitz Avenue prior to disposal. The total excavated area was 11 feet wide by 24 feet long. Approximately 30 cubic yards of concrete and soil were removed during the cleanup action.

In accordance with the Cleanup Plan (CH2MHILL 2007), four, six-point composite soil verification sample were collected from the 6-foot by 7-foot areas (B116AL02CS0801 through B116AL02CS0804) and four, four-point composite soil verification samples from the 4-foot by 6-foot areas (B116AL02CS0805 through B116AL02CS0808) at a depth of 3 feet below the top of the former concrete surface. These eight verification samples (B116AL02-CS0801 through B116AL02-CS0808) were collected on May 9, 2007, and analyzed for PCBs. Total PCB concentrations in these eight samples ranged from 0.89 to 81 mg/kg (Table 3-1). Because total PCB concentrations in these samples exceeded the 0.74-mg/kg industrial preliminary remediation goal (PRG) for high-risk PCBs, additional soil was removed at PCB Sites Building 116 AL#01 and AL#02.

Because the excavation was close to the northwest wall of Building 116, it was possible that additional excavation below 3 feet bgs would pose a structural risk to Building 116. Michael Sanchez of CH2M HILL contacted Mr. Henry Chui of DTSC and received verbal authorization to modify the approach for PCB Sites Building 116 AL#01 and AL#02. Mr. Chui authorized collection of eight composite soil verification samples at both 6 and 10.5 feet bgs using a hand auger prior to removing additional soil (Chui 2007, pers. comm.). Analytical results for these 16 verification soil samples would be used to estimate the excavation depth needed to achieve the remediation goal (0.74 mg/kg) presented in the Cleanup Plan (CH2M HILL 2007). The additional excavation could then be performed and the excavation could be backfilled immediately following the removal to ensure that the structural integrity of Building 116 was not compromised.

On May 30 and 31, 2007, eight composite soil samples were collected at both 6 and 10.5 feet bgs from sample locations B116AL02CS0801 through B116AL02CS0808 at PCB Sites Building 116 AL#01 and AL#02 (Figure 3-1). Four-point composite soil samples were collected at 6 and 10.5 feet bgs at sample locations B116AL02CS0806 through B116AL02CS0808. Refusal was encountered at 7 feet bgs at the southwest subsample collection point of sample location B116AL02CS0805; therefore, a four-point composite soil sample was collected at 6 feet bgs and a three-point composite soil sample at 10.5 feet bgs at sample location B116AL02CS0805. Six-point composite soil samples were collected at 6 and 10.5 feet bgs at sample locations B116AL02CS0801 through B116AL02CS0803. An obstruction was encountered at 3.5 feet bgs at the southeast sample collection point for sample B116AL02CS0804; therefore, five-point composite soil samples were collected at 6 and 10.5 feet bgs at sample location B116AL020804. Total PCB concentrations for all soil samples collected at 6 and 10.5 feet bgs were below laboratory reporting limits (which ranged from 0.019 to 0.02 mg/kg at 6 feet bgs and 0.023 to 0.034 mg/kg at 10.5 feet bgs) (Table 3-1).

After analytical results for verification samples collected at 6 and 10.5 feet bgs were received, it was determined that the excavation at PCB Sites Building 116 AL#01 and AL#02 would continue to 5.5 feet bgs. On June 12, 2007, an additional 2.5 feet of soil were excavated from the site. The excavation was backfilled to grade with compacted gravel.

Debris and soil were transported on June 14, 2007, to Kettleman Landfill in Kettleman Hills, California, for disposal as a Toxic Substances Control Act waste. Appendix B contains copies of the waste manifests for the soil and debris.

TABLE 3-1

Verification Sample Results for PCB Sites Building 116 AL#01 and AL#02

*Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02,
Investigation Area C2, Lennar Mare Island, Vallejo, California*

Sample Number	Sample Matrix	Sample Depth (feet bgs)	Sample Date	Total PCB Concentration ^a (mg/kg)	Comments
B116AL02CS0801	Soil	3	05/09/07	1.8	Removed during overexcavation; Aroclor-1260 = 1.8 mg/kg
B116AL02CS0801	Soil	6	05/30/07	<0.019	Proxy value used for Aroclor-1260 0.019
B116AL02CS0801	Soil	10.5	05/30/07	<0.026	Proxy value used for Aroclor-1260 0.026
B116AL02CS0802	Soil	3	05/09/07	13	Removed during overexcavation; Aroclor-1260 = 13 mg/kg
B116AL02CS0802	Soil	6	05/30/07	<0.019	Proxy value used for Aroclor-1260 0.019
B116AL02CS0802	Soil	10.5	05/31/07	<0.031	Proxy value used for Aroclor-1260 0.031
B116AL02CS0803	Soil	3	05/09/07	81	Removed during overexcavation; Aroclor-1260 = 81 mg/kg
B116AL02CS0803	Soil	6	05/30/07	<0.019	Proxy value used for Aroclor-1260 0.019
B116AL02CS0803	Soil	10.5	05/31/07	<0.034	Proxy value used for Aroclor-1260 0.034
B116AL02CS0804	Soil	3	05/09/07	6.7	Removed during overexcavation; Aroclor-1260 = 6.7 mg/kg
B116AL02CS0804	Soil	6	05/30/07	<0.02	Proxy value used for Aroclor-1260 0.02
B116AL02CS0804	Soil	10.5	05/31/07	<0.031	Proxy value used for Aroclor-1260 0.031
B116AL02CS0805	Soil	3	05/09/07	1.6	Removed during overexcavation; Aroclor-1260 = 1.6 mg/kg
B116AL02CS0805	Soil	6	05/30/07	<0.02	Proxy value used for Aroclor-1260 0.02
B116AL02CS0805	Soil	10.5	05/30/07	<0.023	Proxy value used for Aroclor-1260 0.023
B116AL02CS0806	Soil	3	05/09/07	11	Removed during overexcavation; Aroclor-1260 = 11 mg/kg
B116AL02CS0806	Soil	6	05/30/07	<0.02	Proxy value used for Aroclor-1260 0.02
B116AL02CS0806	Soil	10.5	05/31/07	<0.028	Proxy value used for Aroclor-1260 0.028
B116AL02CS0807	Soil	3	05/09/07	1	Removed during overexcavation; Aroclor-1260 = 1 mg/kg
B116AL02CS0807	Soil	6	05/30/07	<0.02	Proxy value used for Aroclor-1260 0.02

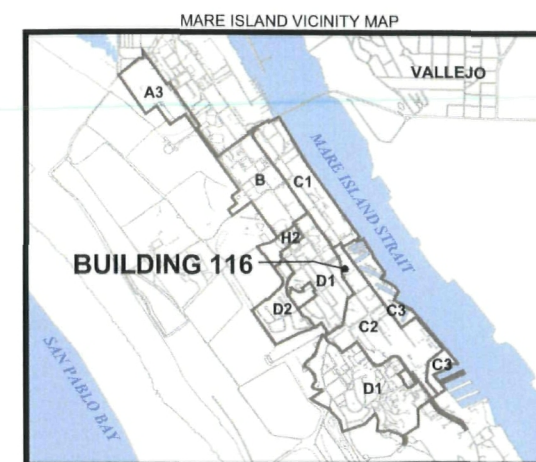
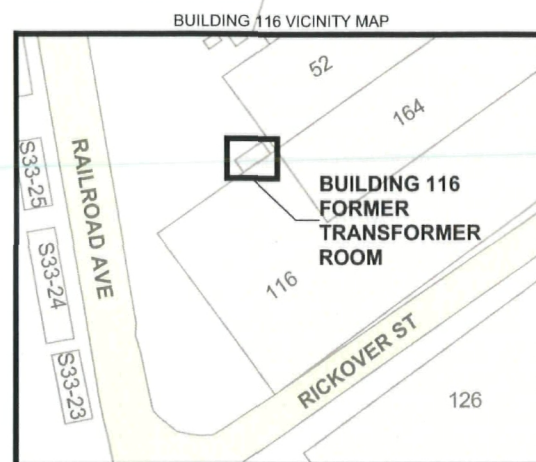
TABLE 3-1

Verification Sample Results for PCB Sites Building 116 AL#01 and AL#02

Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02,
Investigation Area C2, Lennar Mare Island, Vallejo, California

Sample Number	Sample Matrix	Sample Depth (feet bgs)	Sample Date	Total PCB Concentration ^a (mg/kg)	Comments
B116AL02CS0807	Soil	10.5	05/30/07	<0.03	Proxy value used for Aroclor-1260 0.03
B116AL02CS0808	Soil	3	05/09/07	0.89	Removed during overexcavation; Aroclor-1260 = 0.89 mg/kg
B116AL02CS0808	Soil	6	05/30/07	<0.02	Proxy value used for Aroclor-1260 0.02
B116AL02CS0808	Soil	10.5	05/30/07	<0.029	Proxy value used for Aroclor-1260 0.029

^aTotal PCBs were calculated by summing all of the detected Aroclors or by using proxy value of one-half the method detection limit for historically detected Aroclors and adding this to detected Aroclors.



- LEGEND
- VERIFICATION SUBSAMPLE
 - ⊗ COMPOSITE SOIL SAMPLE
 - ▭ PCB SITE BUILDING 116 AL#02
 - ▭ REMOVAL AREA
 - ▭ STRUCTURE
 - ▭ ROAD

SAMPLE LOCATION ————— 7037-0071
PCB CONCENTRATION (mg/kg) ————— 2.1= (0.0)
SAMPLE BEGINNING DEPTH (FEET BGS) —————

- NOTES:
1. "<" = NOT DETECTED AT OR ABOVE THE INDICATED CONCENTRATION
 2. "=" = ANALYTE WAS DETECTED
 3. GRAY LABEL = REMOVED SAMPLE LOCATION
 4. ANALYTE = TOTAL PCBs
 5. FOR SAMPLES COLLECTED BY CH2M HILL, TOTAL PCBs ARE CALCULATED BY SUMMING ALL OF THE DETECTED AROCLORS OR BY USING A PROXY VALUE OF ONE-HALF THE METHOD DETECTION LIMIT FOR HISTORICALLY DETECTED AROCLORS AND ADDING THIS TO DETECTED AROCLORS

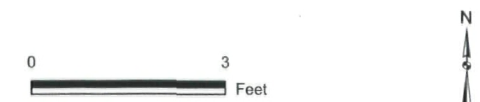


FIGURE 3-1
PCB SITES BUILDING 116 AL#01
AND AL#02 REMOVAL AREA AND
VERIFICATION SAMPLING LOCATIONS
LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

4.0 Polychlorinated Biphenyl Site Closure Process

Under CERCLA, no further action (NFA) is appropriate at a PCB site if no potential source and no PCB contamination are present (CH2M HILL 2003). Even if a potential source or PCB contamination is present in machinery or building materials, NFA is appropriate under CERCLA if there has been no release of PCBs to soil or groundwater and no visible pathway exists for migration of PCBs to soil or groundwater (CH2M HILL 2003). If there has been a known release to soil or groundwater, NFA is also appropriate if the detected PCB concentrations in soil and groundwater do not exceed applicable screening levels or if results of a site-specific risk evaluation demonstrate that potential risks associated with exposure to residual PCBs are within the risk-management range generally used to determine whether cleanup is necessary.

No further sampling or cleanup is necessary at PCB Sites Building 116 AL#01 and AL#02. Total PCB concentrations in verification samples collected from PCB Sites Building 116 AL#01 and AL#02 after cleanup actions were complete were below laboratory reporting limits, which ranged from 0.019 through 0.034 mg/kg, and the industrial PRG of 0.74 mg/kg.

Under CERCLA, an NFA determination would be protective of human health and the environment at PCB Sites Building 116 AL#01 and AL#02. The conditions for DTSC closure of PCB sites have been satisfied at these sites.

5.0 Conclusions

No further sampling or cleanup is necessary at PCB Sites Building 116 AL#01 and AL#02. In May and June of 2007, CH2M HILL removed concrete and soil containing concentrations of PCBs greater than the industrial PRG of 0.74 mg/kg (United States Environmental Protection Agency [USEPA] 2004). PCBs do not remain at PCB Sites Building 116 AL#01 and AL#02 at concentrations greater than the approved cleanup goal (0.74 mg/kg) presented in the Cleanup Plan (CH2M HILL 2007; DTSC, 2007). This approved cleanup goal meets the 2004 industrial PRG for high-risk PCB mixtures (USEPA 2004). The remaining concentrations of PCBs conform to the newly published industrial screening levels for high-risk PCB mixtures (USEPA 2008). PCBs were not detected in the remaining verification samples at or above the maximum laboratory reporting limit of 0.034 mg/kg (Table 3-1 and Figure 3-1).

An NFA determination would be protective of human health and the environment at PCB Sites Building 116 AL#01 and AL#02. Under CERCLA, NFA is appropriate at PCB Sites Building 116 AL#01 and AL#02 because of the following conclusions:

- The source of the PCBs at these sites no longer exists.
- Total PCB concentrations in verification samples collected at 6 and 10.5 feet bgs were below laboratory reporting limits (maximum of 0.034 mg/kg) and the industrial PRG of 0.74 mg/kg.

The conditions for DTSC closure of PCB sites have been satisfied at these sites. Therefore, it is requested that DTSC issue an NFA determination for PCB Sites Building 116 AL#01 and AL#02.

6.0 References

- CH2M HILL. 2003. *Final Polychlorinated Biphenyl Work Plan*. March 7.
- _____. 2007. Letter. "Cleanup Plan for Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02 in Investigation Area C1, Eastern Early Transfer Parcel, Lennar Mare Island, Vallejo, California." January 29.
- Chui, Henry/Department of Toxic Substances Control (DTSC). 2007. E-mail correspondence with Michael Sanchez/CH2M HILL regarding "PCB Site Building 116 AL#01 and AL#02." May 30.
- Department of Toxic Substances Control (DTSC). 2007. Letter. "Lennar Mare Island, PCB Clean Up Plan for PCB Site at Building 116 AL#01 and AL#02 in Investigation Area C1, Dated January 29, 2007." February 21.
- Lennar Mare Island, LLC (LMI), the City of Vallejo, and the State of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2001. *Consent Agreement Between Lennar Mare Island, the City of Vallejo, and the State of California, California Environmental Protection Agency, Department of Toxic Substances Control*. April 16.
- Siler, Neal/Lennar Mare Island, LLC (LMI). 2006. E-mail correspondence with Michael Sanchez/CH2M HILL regarding "PCB Site Building 116 AL#01 and AL#02." October 9.
- Supervisor of Shipbuilding, Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS). 1996a. *PCB Decontamination Technical Work Document (TWD). PCB-Contaminated Transformer Pad. TWD No. 96-1350. Bldg. No. 116*. October 23.
- _____. 1996b. *Final Polychlorinated Biphenyl (PCB) Assessment for Property Leasing Conditions of Building 116*. July 22.
- _____. 1998. *PCB Decontamination Technical Work Document (TWD). PCB-Contaminated Transformer Pad. TWD No. 96-1350 REV. A. Bldg. No. 116*. November 19.
- SWA Group. 2000. *Preliminary Land Use Plan*. May 23.
- Tetra Tech Environmental Management, Inc (TtEMI). 1998. *Final Basewide Polychlorinated Biphenyl Confirmation Sampling Summary Report*. February 13.
- United States Environmental Protection Agency. 2004. *Region 9 Preliminary Remediation Goals*. October 1.

Appendix A
CH2M HILL Verification Sampling
Analytical Data

Appendix A

CH2M HILL Verification Sampling Analytical Data, Building 116

Draft Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Site Building 116 AL#02, Investigation Area C2, Lennar Mare Island, Vallejo, California

Location of Sample	Sample Identifier	Analyte	CAS Number	QA/QC Type	Value (mg/Kg)	Flag [1]	Date and Time of Sample	Sample Beginning Depth (ft BGS)	Sample Ending Depth (ft BGS)	Removed?	Type of Sample	Source of Measurement
PCB Compounds												
B116AL02CS0801	B116AL02CS0801-S10.5	AROCLOR-1016	12674-11-2	ORIG	5.2E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S10.5	AROCLOR-1221	11104-28-2	ORIG	5.2E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S10.5	AROCLOR-1232	11141-16-5	ORIG	5.2E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S10.5	AROCLOR-1242	53469-21-9	ORIG	5.2E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S10.5	AROCLOR-1248	12672-29-6	ORIG	5.2E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S10.5	AROCLOR-1254	11097-69-1	ORIG	5.2E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S10.5	AROCLOR-1260	11096-82-5	ORIG	5.2E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S10.5	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	2.6E-02	U	5/30/2007 3:05:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	AROCLOR-1016	12674-11-2	ORIG	2.0E-01	U	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	AROCLOR-1221	11104-28-2	ORIG	2.0E-01	U	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	AROCLOR-1232	11141-16-5	ORIG	2.0E-01	U	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	AROCLOR-1242	53469-21-9	ORIG	2.0E-01	U	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	AROCLOR-1248	12672-29-6	ORIG	2.0E-01	U	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	AROCLOR-1254	11097-69-1	ORIG	2.0E-01	U	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	AROCLOR-1260	11096-82-5	ORIG	1.8E+00	=	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02-CS0801-S3	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	1.8E+00	=	5/9/2007 11:50:00 AM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	AROCLOR-1016	12674-11-2	ORIG	3.8E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	AROCLOR-1221	11104-28-2	ORIG	3.8E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	AROCLOR-1232	11141-16-5	ORIG	3.8E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	AROCLOR-1242	53469-21-9	ORIG	3.8E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	AROCLOR-1248	12672-29-6	ORIG	3.8E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	AROCLOR-1254	11097-69-1	ORIG	3.8E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	AROCLOR-1260	11096-82-5	ORIG	3.8E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0801	B116AL02CS0801-S6	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	1.9E-02	U	5/30/2007 9:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	AROCLOR-1016	12674-11-2	ORIG	6.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	AROCLOR-1221	11104-28-2	ORIG	6.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	AROCLOR-1232	11141-16-5	ORIG	6.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	AROCLOR-1242	53469-21-9	ORIG	6.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	AROCLOR-1248	12672-29-6	ORIG	6.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	AROCLOR-1254	11097-69-1	ORIG	6.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	AROCLOR-1260	11096-82-5	ORIG	6.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S10.5	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	3.1E-02	U	5/31/2007 10:34:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	AROCLOR-1016	12674-11-2	ORIG	1.9E+00	U	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	AROCLOR-1221	11104-28-2	ORIG	1.9E+00	U	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	AROCLOR-1232	11141-16-5	ORIG	1.9E+00	U	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	AROCLOR-1242	53469-21-9	ORIG	1.9E+00	U	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	AROCLOR-1248	12672-29-6	ORIG	1.9E+00	U	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	AROCLOR-1254	11097-69-1	ORIG	1.9E+00	U	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	AROCLOR-1260	11096-82-5	ORIG	1.3E+01	=	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0802	B116AL02-CS0802-S3	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	1.3E+01	=	5/9/2007 12:00:00 PM	3.0	3.5	Y	Composite Soil	Laboratory

NOTES:

For samples collected by CH2M HILL, Total PCB are calculated by summing detected Aroclors or by summing detected Aroclors to a proxy value (one-half the reporting limit) for historically detected Aroclors.

If Sample Depth = 999, actual Sample Depth is unknown.

[1] FLAGS

= Detected Result
U Non-Detected Result

Appendix A

CH2M HILL Verification Sampling Analytical Data, Building 116

Draft Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Site Building 116 AL#02, Investigation Area C2, Lennar Mare Island, Vallejo, California

Location of Sample	Sample Identifier	Analyte	CAS Number	QA/QC Type	Value (mg/Kg)	Flag [1]	Date and Time of Sample	Sample Beginning Depth (ft BGS)	Sample Ending Depth (ft BGS)	Removed?	Type of Sample	Source of Measurement
PCB Compounds												
B116AL02CS0802	B116AL02CS0802-S6	AROCLOR-1016	12674-11-2	ORIG	3.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S6	AROCLOR-1221	11104-28-2	ORIG	3.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S6	AROCLOR-1232	11141-16-5	ORIG	3.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S6	AROCLOR-1242	53469-21-9	ORIG	3.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S6	AROCLOR-1248	12672-29-6	ORIG	3.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S6	AROCLOR-1254	11097-69-1	ORIG	3.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S6	AROCLOR-1260	11096-82-5	ORIG	3.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0802	B116AL02CS0802-S6	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	1.9E-02	U	5/30/2007 9:50:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	AROCLOR-1016	12674-11-2	ORIG	6.9E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	AROCLOR-1221	11104-28-2	ORIG	6.9E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	AROCLOR-1232	11141-16-5	ORIG	6.9E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	AROCLOR-1242	53469-21-9	ORIG	6.9E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	AROCLOR-1248	12672-29-6	ORIG	6.9E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	AROCLOR-1254	11097-69-1	ORIG	6.9E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	AROCLOR-1260	11096-82-5	ORIG	6.9E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S10.5	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	3.4E-02	U	5/31/2007 10:54:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	AROCLOR-1016	12674-11-2	ORIG	6.9E+00	U	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	AROCLOR-1221	11104-28-2	ORIG	6.9E+00	U	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	AROCLOR-1232	11141-16-5	ORIG	6.9E+00	U	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	AROCLOR-1242	53469-21-9	ORIG	6.9E+00	U	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	AROCLOR-1248	12672-29-6	ORIG	6.9E+00	U	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	AROCLOR-1254	11097-69-1	ORIG	6.9E+00	U	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	AROCLOR-1260	11096-82-5	ORIG	8.1E+01	=	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02-CS0803-S3	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	8.1E+01	=	5/9/2007 12:03:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	AROCLOR-1016	12674-11-2	ORIG	3.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	AROCLOR-1221	11104-28-2	ORIG	3.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	AROCLOR-1232	11141-16-5	ORIG	3.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	AROCLOR-1242	53469-21-9	ORIG	3.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	AROCLOR-1248	12672-29-6	ORIG	3.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	AROCLOR-1254	11097-69-1	ORIG	3.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	AROCLOR-1260	11096-82-5	ORIG	3.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0803	B116AL02CS0803-S6	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	1.9E-02	U	5/30/2007 10:30:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	AROCLOR-1016	12674-11-2	ORIG	6.2E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	AROCLOR-1221	11104-28-2	ORIG	6.2E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	AROCLOR-1232	11141-16-5	ORIG	6.2E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	AROCLOR-1242	53469-21-9	ORIG	6.2E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	AROCLOR-1248	12672-29-6	ORIG	6.2E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	AROCLOR-1254	11097-69-1	ORIG	6.2E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	AROCLOR-1260	11096-82-5	ORIG	6.2E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S10.5	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	3.1E-02	U	5/31/2007 9:45:00 AM	10.5	11.0	N	Composite Soil	Laboratory

NOTES:

For samples collected by CH2M HILL, Total PCB are calculated by summing detected Aroclors or by summing detected Aroclors to a proxy value (one-half the reporting limit) for historically detected Aroclors.

If Sample Depth = 999, actual Sample Depth is unknown.

[1] FLAGS

= Detected Result
 U Non-Detected Result

Appendix A

CH2M HILL Verification Sampling Analytical Data, Building 116

Draft Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Site Building 116 AL#02, Investigation Area C2, Lennar Mare Island, Vallejo, California

Location of Sample	Sample Identifier	Analyte	CAS Number	QA/QC Type	Value (mg/Kg)	Flag [1]	Date and Time of Sample	Sample Beginning Depth (ft BGS)	Sample Ending Depth (ft BGS)	Removed?	Type of Sample	Source of Measurement
PCB Compounds												
B116AL02CS0804	B116AL02-CS0804-S3	AROCLOR-1016	12674-11-2	ORIG	7.7E-01	U	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02-CS0804-S3	AROCLOR-1221	11104-28-2	ORIG	7.7E-01	U	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02-CS0804-S3	AROCLOR-1232	11141-16-5	ORIG	7.7E-01	U	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02-CS0804-S3	AROCLOR-1242	53469-21-9	ORIG	7.7E-01	U	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02-CS0804-S3	AROCLOR-1248	12672-29-6	ORIG	7.7E-01	U	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02-CS0804-S3	AROCLOR-1254	11097-69-1	ORIG	7.7E-01	U	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02-CS0804-S3	AROCLOR-1260	11096-82-5	ORIG	6.7E+00	=	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02-CS0804-S3	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	6.7E+00	=	5/9/2007 12:07:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	AROCLOR-1016	12674-11-2	ORIG	4.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	AROCLOR-1221	11104-28-2	ORIG	4.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	AROCLOR-1232	11141-16-5	ORIG	4.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	AROCLOR-1242	53469-21-9	ORIG	4.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	AROCLOR-1248	12672-29-6	ORIG	4.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	AROCLOR-1254	11097-69-1	ORIG	4.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	AROCLOR-1260	11096-82-5	ORIG	4.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0804	B116AL02CS0804-S6	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	2.0E-02	U	5/30/2007 11:15:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	AROCLOR-1016	12674-11-2	ORIG	4.7E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	AROCLOR-1221	11104-28-2	ORIG	4.7E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	AROCLOR-1232	11141-16-5	ORIG	4.7E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	AROCLOR-1242	53469-21-9	ORIG	4.7E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	AROCLOR-1248	12672-29-6	ORIG	4.7E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	AROCLOR-1254	11097-69-1	ORIG	4.7E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	AROCLOR-1260	11096-82-5	ORIG	4.7E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S10.5	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	2.3E-02	U	5/30/2007 2:10:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	AROCLOR-1016	12674-11-2	ORIG	2.0E-01	U	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	AROCLOR-1221	11104-28-2	ORIG	2.0E-01	U	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	AROCLOR-1232	11141-16-5	ORIG	2.0E-01	U	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	AROCLOR-1242	53469-21-9	ORIG	2.0E-01	U	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	AROCLOR-1248	12672-29-6	ORIG	2.0E-01	U	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	AROCLOR-1254	11097-69-1	ORIG	2.0E-01	U	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	AROCLOR-1260	11096-82-5	ORIG	1.6E+00	=	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02-CS0805-S3	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	1.6E+00	=	5/9/2007 12:10:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	AROCLOR-1016	12674-11-2	ORIG	4.1E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	AROCLOR-1221	11104-28-2	ORIG	4.1E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	AROCLOR-1232	11141-16-5	ORIG	4.1E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	AROCLOR-1242	53469-21-9	ORIG	4.1E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	AROCLOR-1248	12672-29-6	ORIG	4.1E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	AROCLOR-1254	11097-69-1	ORIG	4.1E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	AROCLOR-1260	11096-82-5	ORIG	4.1E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0805	B116AL02CS0805-S6	Total PCBs_B116_09272007	TOTAL PCBs_B116_09272007	ORIG	2.0E-02	U	5/30/2007 8:45:00 AM	6.0	6.5	N	Composite Soil	Laboratory

NOTES:

For samples collected by CH2M HILL, Total PCB are calculated by summing detected Aroclors or by summing detected Aroclors to a proxy value (one-half the reporting limit) for historically detected Aroclors.

If Sample Depth = 999, actual Sample Depth is unknown.

[1] FLAGS

= Detected Result
U Non-Detected Result

Appendix A

CH2M HILL Verification Sampling Analytical Data, Building 116

Draft Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Site Building 116 AL#02, Investigation Area C2, Lennar Mare Island, Vallejo, California

Location of Sample	Sample Identifier	Analyte	CAS Number	QA/QC Type	Value (mg/Kg)	Flag [1]	Date and Time of Sample	Sample Beginning Depth (ft BGS)	Sample Ending Depth (ft BGS)	Removed?	Type of Sample	Source of Measurement
PCB Compounds												
B116AL02CS0806	B116AL02CS0806-S10.5	AROCLOR-1016	12674-11-2	ORIG	5.6E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S10.5	AROCLOR-1221	11104-28-2	ORIG	5.6E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S10.5	AROCLOR-1232	11141-16-5	ORIG	5.6E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S10.5	AROCLOR-1242	53469-21-9	ORIG	5.6E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S10.5	AROCLOR-1248	12672-29-6	ORIG	5.6E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S10.5	AROCLOR-1254	11097-69-1	ORIG	5.6E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S10.5	AROCLOR-1260	11096-82-5	ORIG	5.6E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S10.5	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	2.8E-02	U	5/31/2007 9:20:00 AM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	AROCLOR-1016	12674-11-2	ORIG	7.7E-01	U	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	AROCLOR-1221	11104-28-2	ORIG	7.7E-01	U	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	AROCLOR-1232	11141-16-5	ORIG	7.7E-01	U	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	AROCLOR-1242	53469-21-9	ORIG	7.7E-01	U	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	AROCLOR-1248	12672-29-6	ORIG	7.7E-01	U	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	AROCLOR-1254	11097-69-1	ORIG	7.7E-01	U	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	AROCLOR-1260	11096-82-5	ORIG	1.1E+01	=	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02-CS0806-S3	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	1.1E+01	=	5/9/2007 12:13:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	AROCLOR-1016	12674-11-2	ORIG	4.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	AROCLOR-1221	11104-28-2	ORIG	4.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	AROCLOR-1232	11141-16-5	ORIG	4.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	AROCLOR-1242	53469-21-9	ORIG	4.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	AROCLOR-1248	12672-29-6	ORIG	4.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	AROCLOR-1254	11097-69-1	ORIG	4.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	AROCLOR-1260	11096-82-5	ORIG	4.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0806	B116AL02CS0806-S6	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	2.0E-02	U	5/30/2007 9:20:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	AROCLOR-1016	12674-11-2	ORIG	6.1E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	AROCLOR-1221	11104-28-2	ORIG	6.1E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	AROCLOR-1232	11141-16-5	ORIG	6.1E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	AROCLOR-1242	53469-21-9	ORIG	6.1E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	AROCLOR-1248	12672-29-6	ORIG	6.1E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	AROCLOR-1254	11097-69-1	ORIG	6.1E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	AROCLOR-1260	11096-82-5	ORIG	6.1E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S10.5	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	3.0E-02	U	5/30/2007 3:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	AROCLOR-1016	12674-11-2	ORIG	1.8E-01	U	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	AROCLOR-1221	11104-28-2	ORIG	1.8E-01	U	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	AROCLOR-1232	11141-16-5	ORIG	1.8E-01	U	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	AROCLOR-1242	53469-21-9	ORIG	1.8E-01	U	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	AROCLOR-1248	12672-29-6	ORIG	1.8E-01	U	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	AROCLOR-1254	11097-69-1	ORIG	1.8E-01	U	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	AROCLOR-1260	11096-82-5	ORIG	1.0E+00	=	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0807	B116AL02-CS0807-S3	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	1.0E+00	=	5/9/2007 12:15:00 PM	3.0	3.5	Y	Composite Soil	Laboratory

NOTES:

For samples collected by CH2M HILL, Total PCB are calculated by summing detected Aroclors or by summing detected Aroclors to a proxy value (one-half the reporting limit) for historically detected Aroclors.

If Sample Depth = 999, actual Sample Depth is unknown.

[1] FLAGS

= Detected Result
U Non-Detected Result

Appendix A

CH2M HILL Verification Sampling Analytical Data, Building 116

Draft Site Characterization and Cleanup Action Summary Report for Polychlorinated Biphenyl Site Building 116 AL#02, Investigation Area C2, Lennar Mare Island, Vallejo, California

Location of Sample	Sample Identifier	Analyte	CAS Number	QA/QC Type	Value (mg/Kg)	Flag [1]	Date and Time of Sample	Sample Beginning Depth (ft BGS)	Sample Ending Depth (ft BGS)	Removed?	Type of Sample	Source of Measurement
PCB Compounds												
B116AL02CS0807	B116AL02CS0807-S6	AROCLOR-1016	12674-11-2	ORIG	4.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S6	AROCLOR-1221	11104-28-2	ORIG	4.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S6	AROCLOR-1232	11141-16-5	ORIG	4.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S6	AROCLOR-1242	53469-21-9	ORIG	4.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S6	AROCLOR-1248	12672-29-6	ORIG	4.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S6	AROCLOR-1254	11097-69-1	ORIG	4.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S6	AROCLOR-1260	11096-82-5	ORIG	4.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0807	B116AL02CS0807-S6	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	2.0E-02	U	5/30/2007 10:00:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	AROCLOR-1016	12674-11-2	ORIG	5.8E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	AROCLOR-1221	11104-28-2	ORIG	5.8E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	AROCLOR-1232	11141-16-5	ORIG	5.8E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	AROCLOR-1242	53469-21-9	ORIG	5.8E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	AROCLOR-1248	12672-29-6	ORIG	5.8E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	AROCLOR-1254	11097-69-1	ORIG	5.8E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	AROCLOR-1260	11096-82-5	ORIG	5.8E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S10.5	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	2.9E-02	U	5/30/2007 2:00:00 PM	10.5	11.0	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	AROCLOR-1016	12674-11-2	ORIG	1.8E-01	U	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	AROCLOR-1221	11104-28-2	ORIG	1.8E-01	U	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	AROCLOR-1232	11141-16-5	ORIG	1.8E-01	U	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	AROCLOR-1242	53469-21-9	ORIG	1.8E-01	U	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	AROCLOR-1248	12672-29-6	ORIG	1.8E-01	U	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	AROCLOR-1254	11097-69-1	ORIG	1.8E-01	U	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	AROCLOR-1260	11096-82-5	ORIG	8.9E-01	=	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02-CS0808-S3	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	8.9E-01	=	5/9/2007 12:20:00 PM	3.0	3.5	Y	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	AROCLOR-1016	12674-11-2	ORIG	4.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	AROCLOR-1221	11104-28-2	ORIG	4.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	AROCLOR-1232	11141-16-5	ORIG	4.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	AROCLOR-1242	53469-21-9	ORIG	4.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	AROCLOR-1248	12672-29-6	ORIG	4.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	AROCLOR-1254	11097-69-1	ORIG	4.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	AROCLOR-1260	11096-82-5	ORIG	4.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory
B116AL02CS0808	B116AL02CS0808-S6	Total PCBs_B116_09272007	TOTAL PCBS_B116_09272007	ORIG	2.0E-02	U	5/30/2007 10:40:00 AM	6.0	6.5	N	Composite Soil	Laboratory

NOTES:

For samples collected by CH2M HILL, Total PCB are calculated by summing detected Aroclors or by summing detected Aroclors to a proxy value (one-half the reporting limit) for historically detected Aroclors.

If Sample Depth = 999, actual Sample Depth is unknown.

[1] FLAGS

= Detected Result
U Non-Detected Result

Appendix B
Waste Manifests for
PCB Sites Building 116 AL#01 and AL#02

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number 1000001	2. Page 1 of 1	3. Emergency Response Phone 207-239-1234	4. Manifest Tracking Number 002397346 JJK	
5. Generator's Name and Mailing Address Lorusa Waste Island LLC 600 Walnut Ave. Suite 100 Vallejo, CA 94592			Generator's Site Address (if different than mailing address) Lorusa Waste Island LLC 600 Walnut Ave. Vallejo, CA 94592			
Generator's Phone: 707-239-1234			U.S. EPA ID Number CA 982573632			
6. Transporter 1 Company Name Dew Bros			U.S. EPA ID Number			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Thermal Waste Management 1521 Chelmsford Road Kellerman, CA 94549			U.S. EPA ID Number			
Facility's Phone:						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt/Vol	13. Waste Codes	
1.	207 Polysulfonated High-density Polyethylene Resin Pellets contaminated with up to 0.01% (by weight) of PCB	2 1000	20710	1000	011	01
2.						
3.						
4.						
14. Special Handling Instructions and Additional Information Profile # 207-100 Wear Proper PPE When Handling Material DOT OF SERVICE DATE 5-1-07 2007-01 PCB RA's 264204.19.07 B116 ERG 3111 CP3279						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27 (a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name MICHAEL D. GODWIN (As agent for Lorusa)		Signature Michael D. Godwin		Month Day Year 10/13/07		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Signature Month Day Year 6/14/07 Transporter 2 Printed/Typed Name Signature Month Day Year						
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: U.S. EPA ID Number 18b. Alternate Facility (or Generator) Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. 2. 3. 4.						
20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a Printed/Typed Name Signature Month Day Year						

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number <i>UNIFORM 111</i>		2. Page 1 of <i>1</i>		3. Emergency Response Phone <i>1-800-424-9333</i>		4. Manifest Tracking Number 002397325 JJK	
5. Generator's Name and Mailing Address <i>General Electric Corp 440 Walnut Ave. Suite 100 Valhalla, NY 10595</i>				Generator's Site Address (if different than mailing address) <i>1200 1st St Albany, NY 12202</i>			
Generator's Phone: <i>914-262-1011</i>							
6. Transporter 1 Company Name <i>DEPOT 7111111111</i>				U.S. EPA ID Number <i>2271077-90</i>			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address <i>General Electric Corp 1500 1st St Albany, NY 12202</i>				U.S. EPA ID Number <i>2271077-90</i>			
Facility's Phone:							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit: WT/Vol.	13. Waste Codes	
1.	<i>Flammable Liquid, N.O.S. (F.L.N.O.S.) Shipping container with 1.0 L (0.264 US GAL)</i>	<i>100 11</i>		<i>100</i>	<i>KG</i>	<i>101</i>	
2.							
3.							
4.							
14. Special Handling Instructions and Additional Information <i>Proble 2 in B11231 Wear Proper PPE when handling material OUT OF SERVICE DATE 10.1.07 2007-01 PCB RA 264204-19-07 FRS 1000 SIB 11111 8116</i>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name <i>MICHAEL D. GADWIN (Agent for Lennar)</i>				Signature <i>Michael D. Gadwin</i>		Month Day Year <i>10 14 07</i>	
16. International Shipments: <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.				Port of entry/exit: Date leaving U.S.:			
Transporter signature (for exports only):							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <i>DEPOT 7111111111</i>				Signature <i>DEPOT 7111111111</i>		Month Day Year <i>10 14 07</i>	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number:							
18b. Alternate Facility (or Generator) U.S. EPA ID Number:							
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator) Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
2.		3.		4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a							
Printed/Typed Name				Signature		Month Day Year	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number A000000001	2. Page 1 of 1	3. Emergency Response Phone 1-800-424-9331	4. Manifest Tracking Number 002397324 JJK		
5. Generator's Name and Mailing Address 100 Walnut Ave. Suite 100 Andover, MA 01810				Generator's Site Address (if different than mailing address) 100 Walnut Ave. Andover, MA 01810			
Generator's Phone: 978-682-1013				U.S. EPA ID Number: A000000001			
6. Transporter 1 Company Name Dunlop Transportation Inc.				U.S. EPA ID Number: A000000001			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address National Waste Management 15751 Greenfield Road Baltimore, MD 21244				U.S. EPA ID Number: A000000001			
Facility's Phone:							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
1.	Corrosive Hazardous Waste, liquid in drums, packaged with 1.10 PPE in 30	100	11	22000 GALLONS	EC	9000	
2.							
3.							
4.							
14. Special Handling Instructions and Additional Information Profile # 000000001 Wear Proper PPE When Handling Material DATE: 6-1-07 2007-01 PCB RA 26A20A-19-07 EPA Info Site # 000000001							
15. GENERATOR/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name MICHAEL D. GADWIN (As agent for Lennar)				Signature Michael D. Gadwin		Month Day Year 06/15/07	
16. International Shipments: <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name Albert J. Dunlop Jr.				Signature Albert J. Dunlop Jr.		Month Day Year 06/15/07	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number:							
18b. Alternate Facility (or Generator)				U.S. EPA ID Number			
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a.							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

9883006

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number CAR000123117	2. Page 1 of 1	3. Emergency Response Phone 1-800-838-1477	4. Manifest Tracking Number 002397342 JJK
5. Generator's Name and Mailing Address SITF: Lennar Mare Island LLC 690 Walnut Ave. Suite 100 Vallejo, CA 94592			Generator's Site Address (if different than mailing address) MAIRING: Lennar Mare Island LLC IR09 / IR12 Mare Island, CA		
6. Transporter 1 Company Name INC TRUCKING			U.S. EPA ID Number CAR000148809		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Chemical Waste Management 35251 Old Skyline Road Kettleman City, CA 93239 559-386-9711			U.S. EPA ID Number CAT000646117		
9a. HM					
9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity
			No.	Type	12. Unit WL/Vol.
1. RQ, Polychlorinated Biphenyls, Solids, 9 UN2315, PG II (Soil contaminated with up to 860 PPM Arochlor 1260)			001	DT	21718 00618 Kg
2.					
3.					
4.					
13. Waste Codes					
611 261					
14. Special Handling Instructions and Additional Information Profile #: a) EC7635 Wear Proper PPE When Handling Material OUT OF SERVICE DATE: 6-1-07 Box 51 SITF And Mairing Art in Refuse Area LARRAIA DB B116 2007-01 PCB RAs 264204-A-07 ERG: D171 SIL 06/14/07 PIR JESSIE					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/picarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name MICHAEL D. GODWIN (As agent for Lennar)			Signature <i>Michael D. Godwin</i>		Month Day Year 06/14/07
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit: Date leaving U.S.:		
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Antonio Godiner			Signature <i>Antonio Godiner</i>		Month Day Year 06/14/07
Transporter 2 Printed/Typed Name			Signature		Month Day Year
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number:					
18b. Alternate Facility (or Generator)			U.S. EPA ID Number		
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)			Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. H132		2.		3.	
4.		5.		6.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name Gregory Adams			Signature <i>Gregory Adams</i>		Month Day Year 6/14/07

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number CAR000123117	2. Page 1 of	3. Emergency Response Phone 1-800-838-1477	4. Manifest Tracking Number 002397323 JJK		
5. Generator's Name and Mailing Address STF ; Lennar Mare Island LLC 690 Walnut Ave. Suite 100 Vallejo, CA 94592		Generator's Site Address (if different than mailing address) MAILING : Lennar Mare Island LLC IR09 / IR12 Mare Island, CA					
Generator's Phone: 707 562-1013							
6. Transporter 1 Company Name Pacheco & Sons				U.S. EPA ID Number CAR000182451			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address Chemical Waste Management 35251 Old Skyline Road Kettleman City, CA 93239 559-386-9711				U.S. EPA ID Number CAT000646117			
Facility's Phone:							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt/Vol	13. Waste Codes	
1.	Non RCRA Hazardous Waste Solid (Debris contaminated with 4.430 PPM PCB)	001	DT	20545	Kg	261	
2.							
3.							
4.							
14. Special Handling Instructions and Additional Information Profile #: a) EC5231 Wear Proper PPE When Handling Material. 2007-01 PCB RA 264201-19-97 ERG: 1)/n/a Site: IR18							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name: MICHAEL D. GODWIN (As agent for Lennar)				Signature: <i>Michael D. Godwin</i>		Month Day Year 06 13 07	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name: Tom Pacheco				Signature: <i>Tom Pacheco</i>		Month Day Year 6 13 07	
Transporter 2 Printed/Typed Name:				Signature:		Month Day Year	
18. Discrepancy:							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number:							
18b. Alternate Facility (or Generator)				U.S. EPA ID Number			
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
H152		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name: Singh				Signature: <i>Singh</i>		Month Day Year 6 13 07	